

**Notice of Allowability**

Application No.

09/654,643

Examiner

Emmanuel Bayard

Applicant(s)

CHAU ET AL.

Art Unit

2631

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/5/00.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. 6.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>4, 5</u> | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material    | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|   | 9 <input type="checkbox"/> Other  |

6/A  
9/22/03  
DS

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### DETAILED ACTION

1. This is response to application filed on 9/5/00 in which claims 1-23 are pending. The application has been fully considered therefore this case is in condition for allowance.

### Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Lauer on 09/17/00.

2. The application has been amended as follows:

In page 10 of the drawings, the second "fig. 18B" and third "fig. 18B", have been replaced with --fig. 18D--- and --fig. 18E, respectively.

In page 4 of the specification, after line 28, fig. 18D shows a combination of the signals of fig. 18b-18c--- and --fig. 18E shows an integration signal of fig. 18D--- has been inserted.

In page 4 of the specification, lines 26 and 27, "fig. 17a" and "fig. 17B" have been deleted and replaced with ---fig. 18a--- and ---fig. 18b---, respectively.

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*Reason for allowance*

3. The following is an examiner's statement of reasons for allowance: the present invention teaches communication system. The closest prior arts of Takamoto U.S. Patent No 5,335,207 and DeAndrea et al U.S. Patent No 5,796,781 teaches a similar communication system. However the closest prior arts fail to anticipate or render obvious the following recited features: a driver circuit affixed to the first printed circuit board and coupled to the conductive path to output onto the conductive path a signal having a voltage level that varies in time between at least three distinct levels representative of at least three distinct digital values, the driver circuit including an equalization circuit to adjust the voltage level of the signal output by the driver circuit at a first time according to a digital value represented by the signal at a previous time as recited in claim 1. An equalization mechanism containing an auxiliary driver that is substantially proportional to said main driver, said equalization mechanism adapted to receive said input signals and generate a set of N equalization signals based on said input signals, wherein N is greater than two as recited in claim 12. A first equalization mechanism including a first auxiliary driver having a gain that is substantially proportional to and smaller than said first driver, said first equalization mechanism configured to receive said plurality of input signals and to output on said second line a third signal, whereby said third signal compensates for crosstalk on said second line generated by said first signal as recited in claim 20. In combination with the rest of the system these features have been recited in all independent claims and render them allowable.

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*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeAndrea U.S. Patent No 5,796,781 teaches a data receiver having bias restoration.

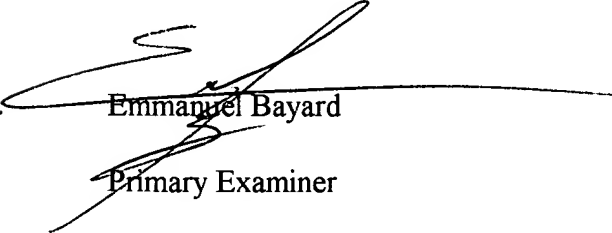
Chon U.S. Patent No 6,222,782 discloses a control circuit for bit line equalization.

Takamoto U.S. Patent No 5,335,207 teaches a semiconductor integrated circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is (703) 308-9573. The examiner can normally be reached on Monday-Thursday from 8:00 AM - 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour, can be reached on (703) 306-3034. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.



Emmanuel Bayard

Primary Examiner

September 17, 2003

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